AMENDMENT UNDER 37 C.F.R. § 1.111 U. S. Application No. 09/784,112

## **AMENDMENTS TO THE SPECIFICATION**

Please amend the last full paragraph of page 3 as follows:

Figure 3 shows an example of the layout image L outputted on CRT-300 for the case where a pair of mammographs are used as the original image. In Figure 3, an entire image P of the right breast and an ROI image W, including a suspected anomalous shadow P1 and an adjacent area P2 thereof, are arranged on the right half of the CRT-300, and an entire image P' of the left breast in which no anomalous shadow was detected is shown on the left half of the CRT

Please amend the paragraph at the bottom of page 16 continuing on to page 17 as follows:

Herein, the dilation operation is an operation of searching the maximum value within a range of ±m, corresponding to the domain of definition G, centered on a pixel of interest (see Figure 8A). The erosion operation is an operation of searching the minimum value within a range of ±m centered on a pixel of interest (see Figure 8B). The opening operation is an operation of searching the minimum value first and then searching the maximum value. The closing operation is an operation of searching the maximum value first and then searching the minimum value. More specifically, the opening operation smoothes the image density distribution on the low-brightness side thereof to filter out up-pointing peaks (i.e., those parts with higher brightness and thus lower image density than adjacent areas thereof) which occur within a range spatially narrower than a mask size (see Figure 8C). The mask size is 2 meters 2m in the present example. On the other hand, the closing operation smoothes the image density distribution on the high-brightness side thereof to filter out down-pointing peaks (i.e., those parts

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with lower brightness and thus higher image density than adjacent areas thereof) which occur

within a range spatially narrower than a mask size (see Figure 8D).